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ABSTRACT

Results of the American Institute of Physics' 1986 annual employment survey in physics and astronomy are presented in table form accompanied by narrative analysis. Information includes: time spent by 1985-86 physics degree recipients in securing employment, by degree level; changes in occupational status of physics and astronomy degree recipients between the summer of 1986 and the following winter; occupational status of experimental and theoretical physicists by type of dissertation research; characteristics of postdoctoral and full-time employed physics and astronomy doctorate recipients; changes in the type of initial employment accepted by new physicists, 1977, 1982, 1986; subfield mobility of new doctoral level physicists, 1985-86; employment with potential permanence accepted by 1985-86 doctorate recipients; characteristics of 1985-86 physics master's and bachelor's recipients related to the type of employment secured; selected characteristics of physics bachelor's recipients that affect their employment, 1986; median monthly salaries paid by civilian employers to bachelor's recipients, 1986; and employment of 1985-86 astronomy bachelor's recipients. (MSE)

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EDUCATION & EMPLOYMENT
STATISTICS DIVISION

Tel.212-661-9404

by Susanne D. Ellis AIP Pub. No. R-282.10 December 1987

EMPLOYMENT SURVEY 1986

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For this survey we asked physics and astronomy graduates who had either terminated or interrupted their studies 6 to 18 months ago to evaluate that decision in retrospect and to describe the circumstances that led to their initial employment.

Each year the largest proportion of degrees is conferred in May and June, a time at which our two annual surveys identify the employment-oriented physics and astronomy graduates at the bachelor's, master's and doctoral levels. Six months later, when the Employment Survey is conducted, it seems relevant to ask each graduate how much time he or she needed to secure suitable employment. The answers from physics degree recipients are summarized in **Figure I**, which presents four time periods during which graduates at each of the three degree levels accepted employment. 'Postdocs' are excluded from the doctoral graduates so as to focus on potentially permanent positions comparable to those sought by the masters and bachelors. The first time period—less than 1 month—is intended to identify graduates who have positions already lined-up when their degrees were conferred. For the graduates of the class of 1986, 43% of the bachelors, 33% of the masters and 10% of the doctorate recipients fell into this category. This distribution indicates that graduate-degree holders generally require more time than bachelors to review their employment options.

Figure I. Time spent by 1985–86 physics degree recipients in securing employment.

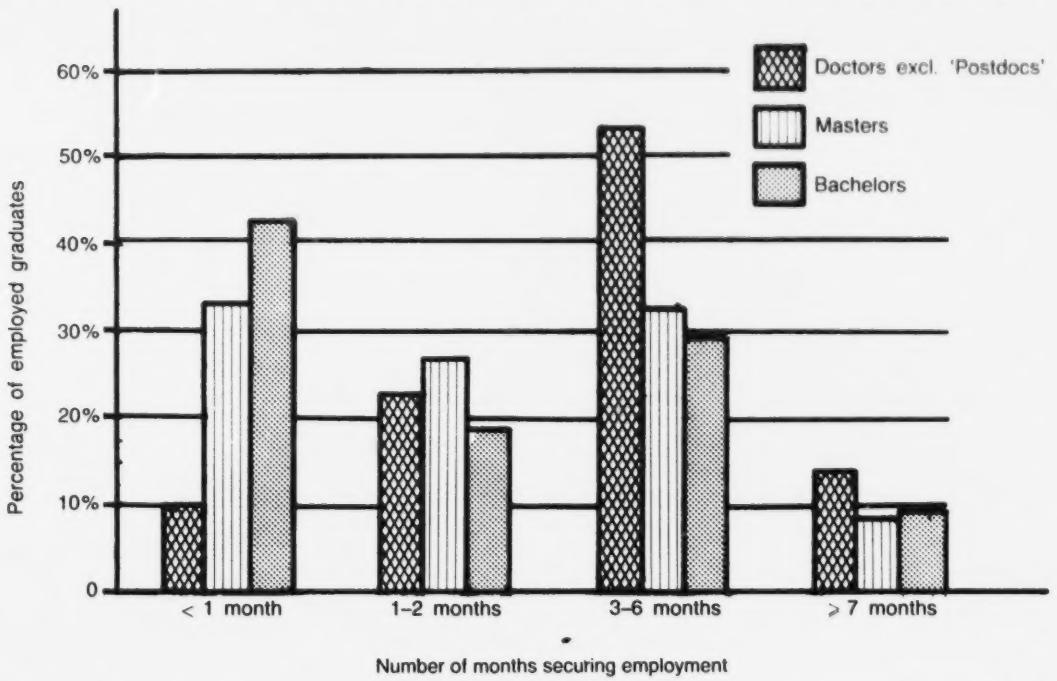

Table I. Changes in occupational status of physics degree recipients between the summer of 1986 and the following winter.

Employment status reported by physics degree recipients, summer 1986		Occupational status, winter 1986–87					
		'Postdoc' or student	Employment full-time permanent	Other	Not employed and seeking	Total N	Total %
Doctors							
Newly accepted empl.		13	133	6	–	152	31
Continuing employment		4	13	–	–	17	4
'Postdoc'		263	7	2	–	272	56
Return to foreign country		3	3	–	1	7	1
Other		6	4	3	–	13	3
Not empl. and seeking		12	3	2	8	25	5
Total respondents	N	301	163	13	9	486	
	%	62	33	3	2		100%
Masters							
Newly accepted empl.		1	57	–	1	59	35
Continuing employment		1	29	–	3	33	20
Return to foreign country		2	3	–	–	5	3
Other		8	16	–	2	26	15
Not empl. and seeking		1	27	–	17	45	27
Total respondents	N	13	132	–	23	168	
	%	7	78	–	14		100%
Bachelors							
Newly accepted empl.		4	295	–	3	302	37
Continuing employment		2	118	–	2	122	15
Military service		–	144	–	1	145	17
Summer employment		5	65	9	20	99	12
Other (incl. part-time)		5	5	2	9	21	2
Not empl. and seeking		10	86	4	37	137	17
Total respondents	N	26	713	15	72	826	
	%	3	86	2	9		100%

To examine the changes in occupational status during the six-month period between surveys, we present **Tables I** and **II**, both of which include U.S. as well as foreign degree recipients. Each table has three parts, which correspond to the three degree levels. The first column of each table lists the occupational status as reported by the physics and astronomy graduates in the summer of 1986. Thus, from **Table I** we note that 35% of the doctorate recipients had secured permanent employment, 56% had accepted 'postdocs', 5% were still seeking suitable employment and 3% (grouped under "other") were uncertain about remaining in the U.S. Six months later, during the winter of 1986–87, we noticed an increase in 'postdocs', (six percentage-points) while the unemployed group declined to 2%.

The post-degree plans of the masters and bachelors include an option rarely considered by the doctorate recipients, namely that of returning to, or starting, graduate school. The proportion of masters who select that option is generally greater than that of the bachelors because they are more likely to think of themselves as physicists which, in turn, strengthens their incentive to continue their studies toward a PhD. One-fifth of the bachelors view their employment as a one-year re-orientation period to help them decide which graduate studies to pursue. Nevertheless, everyone included in **Table I** had indicated an interest in immediate employment following graduation. Although the percentages of the unemployed masters and bachelors decreased to approximately half their value in that six-months period, both resulted in larger proportions than those recorded in the previous year.

Table II. Changes in occupational status of astronomy degree recipients between the summer of 1986 and the following winter.

Employment status reported by astronomy degree recipients, summer 1986.			Occupational status, winter 1986–87				
			'Postdoc' or student	Employed	Not employed and seeking	Total N	Total %
Doctors							
Regular employment			–	9	–	9	21
'Postdoc'			30	1	–	31	72
Other			–	2	–	2	5
Not empl. and seeking			1	–	–	1	2
Total respondents	N		31	12	–	43	
	%		72	28	–		100%
Masters							
Regular employment			–	3	1	4	67
Not empl. and seeking			–	1	1	2	33
Total respondents	N		–	4	2	6	
	%		–	67	33		100%
Bachelors							
Regular employment			–	6	–	6	43
Military			–	3	–	3	21
Summer employment			–	4	–	4	29
Not empl. and seeking			–	–	1	1	7
Total respondents	N		–	13	1	14	
	%		–	93	7		100%

Three-quarters of the new astronomers traditionally accept 'postdocs', and **Table II** indicates no change from that trend. Among the non-doctoral astronomy degree holders only three graduates remained not employed and seeking. Four of the employed bachelors continued to look for full-time positions while they held permanent part-time positions.

Two characteristics play an important part in determining the type of initial employment new doctoral physicists accept; they are citizenship and the type of research their dissertations were based on. **Table III** relates both characteristics to the occupational status that the new physicists reported in the winter of 1986–87, and shows, for example, that a majority (55%) of the U.S. experimentalists accepted 'postdocs'. The increase over the previous year can be linked to an anticipated increase in university faculty positions for which 'postdocs' are desirable preparations.

Table III. Occupational status of experimental and theoretical physicists by type of dissertation research, 1985–86.

Occupational status		Experimentalists U.S.	Experimentalists Foreign	Experimentalists Sub-total	Theoreticians U.S.	Theoreticians Foreign	Theoreticians Sub-total	Total
Full-time employment		43%	21%	36%	38%	12%	28%	33%
'Postdoc'		55	74	60	57	78	65	62
Other		1	2	2	5	4	5	3
Not empl. and seeking		1	3	2	–	6	2	2
		100%	100%	100%	100%	100%	100%	
Total	N	230	90	320	99	67	166	486
	%			66			34	100%

Table IV. Characteristics of postdoctoral and full-time employed physics and astronomy doctorate recipients, 1985–86.

Physics			Astronomy		
Characteristics	'Postdocs'	Full-time employed	'Postdocs'	Full-time employed	Characteristics
Sex					Sex
Female	8%	10%	16%	8%	Female
Male	92	90	84	92	Male
Age					Age
26 or younger	5%	4%	6%	–	26 or younger
27 years	13	8	6	17	27 years
28 years	15	20	23	17	28 years
29 years	16	12	16	25	29 years
30 years	13	13	16	17	30 years
31–32 years	17	18	20	8	31–32 years
33 or older	21	25	13	16	33 or older
Citizenship					Citizenship
U.S.	61%	83%	74%	92%	U.S.
Foreign	39	17	26	8	Foreign
Type of research					Type of research
Experimental	64%	72%	69%	82%	Experimental
Theoretical	36	28	31	18	Theoretical
Major subfield of dissertation					Major subfield of dissertation
Astrophysics	5%	6%	13%	17%	Astrophysics
Electron/atomic/molecular	12	9	19	8	Cosmology/extragalactic/ quasi-stellar objects
Elementary particles	20	9			
Mathematical physics	5	3	10	8	Galactic structure, stellar motions
Nuclear physics	11	6	13	42	Stellar atmospheres and spectra/ stellar evolution/solar and stellar interiors
Plasma/fluids	5	9			
Solid state	33	44			
			19	17	Interstellar matter and gaseous nebulae
			7	8	Solar systems
Number of respondents	301	163	31	12	

Having discussed the distinction between temporary postdoctoral and potentially permanent initial employment, we single out the physicists and astronomers who fall into these two categories and examine five of their characteristics in **Table IV**. This selection process excludes 22 new physicists from **Table I** because they had not yet chosen a full-time occupation. The discussion dealing with changes in characteristics from earlier years is limited to physicists because the number of astronomers is comparatively small. Thus the most conspicuous change from the 1985 data was the shift from potentially permanent to postdoctoral employment; both U.S. and foreign graduates contributed to this shift but for different reasons. Foreign graduates by and large hold visas that restrict their employment to temporary 'postdocs'; U.S. degree recipients, on the other hand, choose temporary 'postdocs' when they perceive the market to be favorable, and consequently feel free to pursue specific research interests for a limited time. Thus an approximate 1:1 ratio between 'postdocs' and potentially permanent positions in 1985 became nearly a 2:1 ratio between the two groups in one year. A longer trend of citizenship data is presented in **Figure II**.

Changes in the age distributions from the previous year include four to five percentage-point increases in the proportion of physicists who are age 30 or older. **Table IV** also reflects an increase in 'postdocs' who perform experimental research. Changes in the major subfields of dissertations include an increase in solid state physics at both types of initial employment, as well as a shift from nuclear physics to electron, atomic and molecular physics for 'postdocs'.

Despite the growing demand for new doctoral physicists in the U.S., the proportion of the newly employed who are foreign citizens has been almost constant over the past ten years. **Figure II** is based on annual data from the citizenship characteristic in **Table IV** and depicts three representative years during that period for which those percentages were 16, 14 and 17 respectively. Among the 'postdocs', on the other hand, the foreign citizens more than doubled their proportions from 18% in 1977, to 28% in 1982 and to 39% in 1986. Where new U.S. physicists are concerned, **Figure II** clearly shows their recent shift from permanent toward temporary postdoctoral initial employment.

Table V presents still another comparison between the 'postdocs' and graduates with potentially permanent positions by focusing on subfield mobility. The large percentages along the diagonal of the upper half of the table indicate that few 'postdocs' change subfields. By contrast, the lower half of **Table V** illustrates the adaptability of new physicists. For each of the six dissertation subfields fewer than half of the respondents were able to secure potentially permanent employment in their specialty. Nuclear physicists appear to be spread among the largest number of specialties for their initial employment.

Figure II. Changes in the type of initial employment accepted by new physicists, 1977, 1982, 1986.

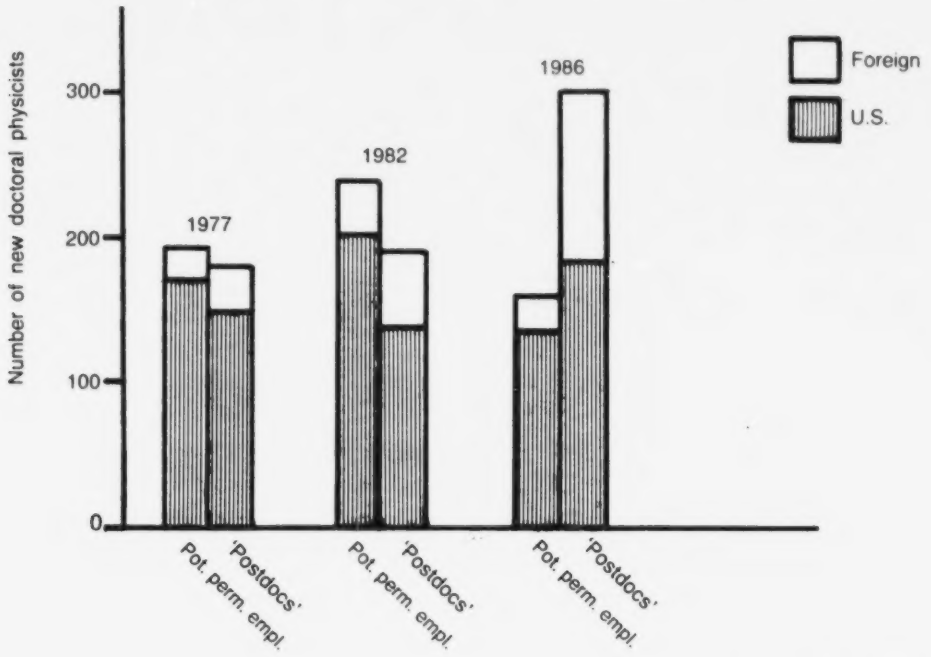

Table V. Subfield mobility of new doctoral level physicists, 1985–86.

	Subfields of 'postdoc'							
Major subfield of dissertation	Astrophysics	Electron/ atomic/ molecular	Elementary particles	Mathematical physics	Nuclear physics	Solid state	Other	Total respondents
Astrophysics	86%	–	–	7%	–	–	7%	15
Electron/atomic/molec.	–	72%	3%	–	3%	6%	16	36
Elementary particles	3	2	85	2	5	–	3	59
Mathematical physics	7	–	14	57	–	14	8	14
Nuclear physics	3	6	3	3	76	–	9	33
Solid state	–	–	–	1	–	84	15	99
								256

	Subfields of potentially permanent employment										
Major subfield of dissertation	Astro-physics	Elec./ atom./ molec.	Elem. part.	Nuclear	Plasma/ fluids	Solid state	Geo-physics	Optics	Applied physics	Other	Total respondents
Astrophyics	33%	–	–	–	–	11%	11%	–	22%	23%	9
Electron/atomic/molecular	–	47%	–	–	–	7	–	7%	13	26	15
Elementary particles	–	–	25%	6%	6%	13	–	6	13	31	16
Nuclear physics	10	–	10	10	–	–	–	10	20	40	10
Plasma/fluids	–	7	7	–	40	7	13	7	13	6	15
Solid State	–	1	–	1	4	41	3	7	30	13	74
											139

Tables VI through **X** relate pertinent employment characteristics of new physicists and astronomers to one another and include the median monthly salaries reported in this follow-up survey. At the doctorate level only starting salaries for potentially permanent positions are shown and those for 'postdocs' are excluded.

Thus **Table VI** examines five employment-related characteristics of 163 new doctoral physicists. Industry, as the largest employer and the one that pays the highest median salary, is also the one more likely to oblige new physicists to change subfields. The situation is different for physicists employed by the government or a university; a majority of them work in the

Table VI. Employment with potential permanence accepted by 1985–86 doctorate recipients.

Characteristics		Type of employer: Univ.	4-yr. coll.	Industry	Civil. gov't.	FFRC	Other	Total: N	%
Subfield of Ph.D	Astrophysics/geophysics	7	1	4	4	–	–	16	10
	Electron/atomic/molec.	3	1	4	1	3	2	14	9
	Elementary particles	–	2	6	2	3	2	15	9
	Nuclear physics	3	1	3	1	1	1	10	6
	Plasma/fluids	1	–	8	1	3	2	15	9
	Solid state	9	3	42	7	6	4	71	44
	Other	3	1	12	3	3	–	22	13
Work activity	Teaching	3	9	1	–	–	–	13	8
	Research	20	–	21	10	11	4	66	40
	Res./dev./des.	3	–	50	8	6	1	68	42
	Other	–	–	7	1	2	6	16	10
Physics related work	Same subfield	18	1	28	15	12	3	77	47
	Different subfield	6	8	42	2	4	4	66	40
Unrelated to physics	Research-oriented	2	–	5	1	3	2	13	8
	New area	–	–	2	1	–	–	3	2
	Other	–	–	2	–	–	2	4	3
Interested in a job change	Yes	6	3	19	2	4	3	37	23
	No	19	6	52	14	13	6	110	67
	Unsure	1	–	8	3	2	2	16	10
Starting salary	Monthly median	$2525	$2000	$3570	$3100	$3300	$3200	144	$3250
Total respondents	N	26	9	79	19	19	11	163	
	%	16	5	48	12	12	7		100%

Table VII. Characteristics of 1985–86 physics masters related to the type of employment secured.

Characteristics		Employment: Univ.	Industry: manuf.	Industry: service	Gov't. incl. milit.	Other	Not empl. and seeking	Total: N	%
Sex	Female	24%	7%	10%	10%	38%	22%	22	14
	Male	76	93	90	90	62	78	133	86
Age	24 or younger	38%	26%	10%	10%	–	17%	33	21
	25–26 years	20	37	26	38	38%	36	50	33
	27–28 years	19	11	21	19	25	17	24	15
	29–30 years	5	11	11	14	25	4	17	11
	31 or older	18	15	32	19	12	26	31	20
Citizenship	U.S.	95%	94%	95%	95%	75%	78%	141	91
	Foreign	5	6	5	5	25	22	14	9
Type of graduate inst.	Public	100%	69%	95%	86%	75%	96%	126	81
	Private	–	31	5	14	25	4	29	19
Type of employment	Physics related	86%	85%	68%	86%	72%	–	110	83
	Unrelated to physics	14	15	32	14	28	–	22	17
Major subfield of degree	Applied physics	19%	15%	11%	24%	13%	26%	27	17
	Cross disciplinary	14	11	11	14	25	22	24	15
	Optics	–	17	11	19	–	–	17	11
	Solid state	24	28	21	14	25	32	43	28
Major work activity	Res./dev./des.	29%	78%	42%	62%	13%	–	70	45
	Data Analysis	–	11	26	14	–	–	15	10
	Teaching	48	–	5	–	50	–	25	16
Median monthly salary		$1830	$2550	$2520	$2300 civil. $1710 milit.	$2300	–	103	$2300
Total respondents	N	30**	54	19	21	8	23	155*	
	%	19	35	12	14	5	15		100%

There were an additional 13 masters who returned to graduate school.

****The analysis of the characteristics is based on the 21 masters employed by universities. The total includes secondary schools and four-year colleges which employed six masters and three masters, respectively.***

subfields of their dissertations. Among the 26 respondents who had accepted university positions, 14 physicists identified those positions as "tenure-track." The four-year colleges, paying the lowest median salary, attracted only 5% of the respondents from **Table VI** because these positions allow little time for research. The fourth characteristic measures the degree of satisfaction these new physicists experience. In answer to whether they are interested in changing jobs within the next two years, two-thirds of them replied "no", a proportion equal to the one recorded in the previous year. The median salary for all employers combined reflects a 2% increase over the one reported by the same group six months earlier.

Background characteristics as well as those pertaining to the current employment of new physics masters are related to three specific types of employers in **Table VII**. Only 155 of the 168 masters presented in **Table I** are analyzed in **Table VII** because 13 degree recipients decided to resume their graduate studies after investigating the job market for a short period of time. The largest employer, industry, is divided into two categories because the utilization of one's training differs for the two types. Consequently, masters working in a service industry include the largest proportion of graduates who describe their employment as "unrelated to physics".

Among the thirty masters employed by educational institutions, twenty-one of them work for universities, leaving six secondary school teachers and three masters whose initial employers were 4-year colleges. The characteristics of the two smaller groups vary significantly from those of the university employees, hence they are excluded from the data presented in the first column of **Table VII**. For example, the six masters whose initial employers were secondary schools included no women, no foreign citizens and four out of the six masters graduated from private institutions. The characteristics of university employees are closer to those of all physics masters combined (shown in the "Total" column) with two major exceptions: None of the 21 masters employed by universities graduated from a private institution and their median salary is considerably lower.

Approximately 100 physics masters reported their salaries in the follow-up survey and for all employers combined, **Table VII** shows it to be $2300/month. By singling out those masters who described their work as being defense-related either in industry or the government, the median salary for that group was $2600/month.

As the largest group of respondents to this follow-up survey, the physics bachelors lend themselves to a more detailed analysis of their initial employment than did the physics masters. Thus **Tables VIII** and **IX** both focus on the employment of physics bachelors but with a different emphasis. **Table VIII** presents eight characteristics that are influential in determining the types of positions bachelors accepted while **Table IX** examines employer characteristics best shown in terms of horizontal percentages.

From **Figure I** we saw that two-thirds of the physics bachelors secured initial employment within a two-month period; **Table VIII** elaborates on those data by listing the methods used to secure employment and the number of job offers received. Compared to the previous year, more bachelors chose to join the military service and the proportion of bachelors who were unemployed rose by two percentage points. The distribution of work activities reported by the bachelors indicates a five percentage-point shift away from research and development and toward teaching.

Table VIII. Characteristics of 1985–86 physics bachelors related to the type of employment secured.

		Employment										
				Industry							Total	
Characteristics		Sec. school	Coll./ univ.	manuf.	serv.	Civil. gov't.	Military service	Nonprf. org.	Other	Not empl.	N	%
Sex	Female	16%	16%	15%	12%	30%	6%	29%	17%	11%	122	15
	Male	84	84	85	88	70	94	71	83	89	704	85
Age	22 or yourger	32%	32%	33%	36%	35%	60%	48%	43%	32%	310	38
	23 years	31	23	26	32	33	20	28	30	26	230	28
	24–25 years	16	12	20	15	16	12	10	15	18	133	16
	26 or older	21	33	21	17	16	8	14	12	24	153	18
Type of employment	Physics related	80%	74%	66%	43%	79%	55%	33%	44%	–	501	61
	Unrelated to physics	20	26	34	57	21	45	67	56	–	325	39
Number of job offers	1	41%	61%	49%	54%	56%	88%	76%	77%	4%	471	62
	2	35	19	32	23	27	5	19	8	–	165	22
	3	24	20	19	25	17	7	5	15	–	121	16
Region of employment	Northeast	37%	20%	25%	26%	20%	11%	38%	25%	–	181	24
	Southeast	8	14	11	15	38	35	4	14	–	136	18
	Central/Mountain	47	34	35	38	18	40	29	39	–	264	35
	Pacific	8	32	29	21	24	14	29	22	–	173	23
Major work activity	Res./dev./des.	–	22%	49%	26%	50%	12%	25%	28%	–	203	32
	Data analysis	–	17	12	19	14	5	–	14	–	77	12
	Teaching	98%	20	1	1	6	–	15	7	–	70	11
Primary method which secured employment	Univ. placement	26%	16%	23%	19%	23%	2%	–	–	–	121	16
	Resumes	43	25	31	26	30	1	29%	33%	–	188	25
	Contacts/faculty	20	41	27	29	22	2	52	50	–	173	23
	Military	–	–	–	1	1	94	–	–	–	83	11
Level of experience	Newly accepted	98%	90%	95%	89%	93%	13%	90%	90%	–	581	77
	Cont. employment	2	10	5	11	7	87	10	10	–	173	23
Total respondents	N	51	43	218	141	94	138	21	48*	72	826	
	%	6	5	26	17	11	17	3	6	9		100%

This total includes 26 respondents who chose graduate study after investigating the job market; only the first two characteristics apply to them.

Table IX. Selected characteristics of physics bachelors that effect their employment, 1986.

Characteristics		Employer: Sec. school	Coll./ univ.	Industry: manuf.	Industry: serv.	Civil. gov't.	Military	Nonprf. org.	Other	Not empl.	Totals: %	Totals: N	Totals: %
Sex	Female	7%	6%	27%	13%	25%	4%	5%	6%	7%	100%	120	15
	Male	6	5	27	17	9	19	2	6	9	100%	706	85
Type of bachelor's institution	Public	5%	6%	26%	17%	11%	18%	2%	6%	9%	100%	512	62
	Private	8	5	22	21	11	15	3	7	8	100%	314	38
Type of degree	BS	5%	4%	25%	17%	10%	20%	2%	7%	10%	100%	611	74
	BA	10	8	23	22	13	8	4	7	5	100%	215	26
Median monthly salary		$1320	$1500	$2160	$2030	$1910	$1620	$1070	$1250	–	All employers		$1800

Table X. Median monthly salaries paid by civilian employers to physics bachelors, 1986.

N = 614	Work activity: Res./dev./ design	Data anal./ progr.	Technician Res. asst.	Teaching	Tech. writing/ mrktng.	Mgt. training	Skilled labor	Unskilled labor	Other	All empl. comb.
Salary	$2150	$2050	$1750	$1350	$2050	$2050	$1150	$850	$1500	$1930
% respondents	37	13	11	11	3	9	6	2	8	100%

The proportion of women among the employment-oriented physics bachelors did not change significantly from the previous year, but **Table IX** shows more clearly than **Table VIII** that they are less likely to be unemployed, equally accepted by manufacturing industry and more likely to hold civilian government positions than their male counterparts. Examining the median salaries paid by different types of employers, it appears from **Table IX** that a larger proportion of graduates from private rather than public institutions accepted the lower-paid positions offered by secondary schools and service industry. A similar observation can be made for bachelors with arts rather than science degrees in physics; a higher proportion of them are attracted to teaching or technical writing positions at educational institutions, both of which fall onto the lower end of the salary scale. However, where difficulties in finding employment are concerned, the bachelors with science degrees appear to be twice as likely to be unemployed as the bachelors with arts degrees. It is generally assumed that the latter group benefitted from a broader education.

For purposes of comparison with the physics masters we included in **Table IX** the median salaries of bachelors by type of employer. However, a more relevant presentation of bachelors' salaries is to relate them to the different work activities bachelors report and exclude the military. Thus, **Table X** focuses on civilian employment and shows a combined median salary of $1930/month which compares with a combined median of $1800/month the military is included. Other parameters that influence salaries are whether or not the new bachelors are engaged in defense work. For example, the median salary of 120 physics bachelors who work for defense contractors was $2315/month compared with a median salary of less than $1700/month for bachelors not involved in defense work. Other reports of low salaries in the follow-up survey came from bachelors who either held part-time positions or were unemployed at the time of the earlier survey; their median salary was $1530/month.

Table XI. Employment of 1985–86 astronomy bachelors.

Employment N = 14	Job offers: Zero	One	Two	Three		Median monthly salary: < $1400	$1700	> $2100
Astronomy related	–	3	–	1	Full-time civilian	3	–	3
Unrelated to astronomy	–	6	3	–	Military	–	3	–
					Part-time civilian	4	–	–
	1	9	3	1		7	3	3

The demand for college graduates who have majored in astronomy and chose not to pursue a graduate degree in that science is extremely limited. From the class of 1986, only 14 astronomy bachelors who responded to this follow-up survey fell into this category. All of them are male U.S. citizens whose most common method for finding employment was the contacts of faculty or friends; no one used his college placement office. **Table XI** summarizes some of their employment characteristics by showing all but one graduate received offers and accepted positions which corresponded to a wide range of salaries. Only three graduates were able to secure astronomy-related work but the comments of all of them were favorable in regard to their choice of major.

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